the State treasury, but just to what degree experiment alone can determine.

Appended is a summarized table taken from page 746 of Part I. of the Annual Report of the State Board of Assessors for 1905:—

Assessed valuation of railroads and canals, excepting property of the second class and tangible personalty, but including valuation of franchises not separately given	$162,719,300.00
Assessed valuation of tangible personalty necessary for and used in State (not interstate) commerce .	27,478,943.00
Total assessable for State uses	190,198,243.00
Assessed valuation of "second-class" property (hereafter to be assessed by local officials and not by State Board of Assessors)	46,522,328.00
Aggregate assessed valuation	236,720,571.00
Tax for State uses	950,991.21
Tax for uses of taxing districts	1,136,261.29
Total taxes assessed (for 1905)	2,087,252.50

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SELIGMAN'S PRINCIPLES OF ECONOMICS.[1]

Professor Seligman's volume is designed to be a text-book, and is to be judged mainly as such. No doubt the preparation even of the shortest text-book gives abundant room for the exercise of the critical and constructive faculty. In the present confused state of economic theory there is no possibility of confining one's self to the mere exposition of accepted principles. None the less the main thing is to state clearly and simply those principles—after all, not a few—on which economists are agreed, and to point the way to further study for those who are so minded.

From this point of view the question that presents itself at the outset in considering Professor Seligman's book is the order in which the topics are presented. There is a first

[1] *Principles of Economics, with Special Reference to American Conditions.* By Edwin R. A. Seligman, McVickar Professor of Political Economy, Columbia University. New York: Longmans, Green & Co. 1905.

part, on fundamental concepts and questions of law and method; then a second part, on the foundations of economic life (natural environment, population), the development of economic life and thought, and the conditions of economic life (property, competition, slavery); and, finally, a third part, treating value, production, exchange, distribution, money, international trade, and the other subjects that make up the kernel of economics. I speak of this third part as final, for a fourth part, headed "Conclusion," is brief, containing but two chapters, on government and business (socialism, public ownership, and the like) and on riches and poverty. Finance and taxation are not treated at all,—a limitation in scope which, in view of the apportionment of space to the other subjects, must be held wise.

This is the order commonly found in recent text-books, which therein follow the German model. My own judgment has long been that it is a bad order,—at least, in a book designed for beginners. When an author addresses those already conversant with the subject, it does not greatly matter at what place he delivers himself on questions of law and method, of private property and competition. The trained student will see the bearing of it all. I am inclined to believe, indeed, that even in a book for such readers opinions on scope and method are better understood after, not before, the writer has set forth the specific economic laws in which he has faith. But in a text-book all this preliminary fencing can signify nothing to the persons for whom it is intended. Your beginning student has not the remotest idea what an economic law is; and the only way to teach it to him is by concrete example,—by getting into his head the principles of value, price, rent, interest, wages, and what not. When once he has grasped these, it will be worth while to generalize, to point out what is the nature of the conclusions reached, and in what sense they are "laws." Until he has grasped them, all discussion about economic law is meaningless. The same holds good of economic method. What can the beginner conceive as to inductive and deductive methods, or why "each method, when pushed to an extreme, is either

dangerous or barren"? (p. 28). Here, again, it may be worth while, *after* the student has worked his way to some conclusions, to point out how they have been reached, and what sort of evidence exists for substantiating them. But to consider economic method in advance is futile. So it is as to the relation of economics to other sciences: until one knows something of the subject-matter of economics itself, how is it possible to form a notion of its relation to other sciences? In the section on this last topic Professor Seligman remarks, for example, that "value can have no existence apart from the mental conditions of man. The whole conception of demand is essentially psychological" (p. 29). What can this signify to the youth or maiden who has yet to learn the first elements of the meaning of value and demand in economics? I suspect that most teachers of economics have found it best to skip the whole or nearly the whole of such introductory matter as is contained in Professor Seligman's first part, and to proceed at once to something more readily grasped by their pupils.

Something of the same sort is to be said of the second part, in which are treated such subjects as population, economic history, the growth of economic thought, private property. Opinions doubtless would differ here, yet my judgment is that most can be postponed with profit. Consider such a subject as the history of economic thought,—classical antiquity, the mercantilists, the British school, modern economics. I doubt whether the elementary student can get, under any circumstances, much notion of what all this means,—hardly more than a string of names and a date or two. The situation is substantially the same as to private property and the theories thereon. Here we find Professor Seligman, for example, arguing as to the labor theory of property, the influence of labor and of demand, the relation of great fortunes and inheritance taxes to enterprise and accumulation (pp. 133, 138),—reasoning which can be intelligible only to one who has already been taught something of the relation of labor and utility to value, and of private accumulation to social capital.

The case is more doubtful as to other topics taken up in the second part, especially population and economic history. Following the example of Professor Adolf Wagner, Professor Seligman discusses the theory of population in his early foundation-laying chapters. No doubt this subject can be made interesting and in some respects comprehensible to the beginner; but can its significance be made clear? Professor Seligman discusses three conclusions that might be drawn from the Malthusian doctrine, as to socialism, wages, and economic progress (p. 61). Once again the question arises whether the student at this early stage, before a word has been said as to production, distribution, the causes of progress, and the obstacles to it, can follow the reasoning. I speak not now of the discussion itself, which seems to me open to some criticism, but only of the place which is given it in the unfolding of the subject.

As to economic history, probably there would be many to approve its presentation in the earlier chapters, like those on the economic stages, the historical forms of enterprise, the economic development of the United States. The interest and importance of these topics are not to be denied; yet to what extent can they find a place in a text-book, and what place? Take the economic stages. Is it worth while to enumerate the stages of primitive technique, and to inform the student that the archæologists are now doubtful whether the bronze age preceded the iron age, or succeeded, or was contemporaneous with it (p. 70)? In connection with the analysis of capital, historic illustration of the growth of tool-using might be helpful. But is it worth while to tell the beginner that "it is erroneous to assume that the hunter was necessarily succeeded by the herdsman," and "in the same way it is erroneous to think that the herdsman was everywhere succeeded by the farmer" (p. 72)? Or shall we bring to his attention "the original monopoly of sexual relations," "the ensuing promiscuous methods," "the uterine clan," "the origin of totem worship, still shrouded in mystery" (pp. 85, 86)?

No one doubts the interest and significance of economic

history. Yet any adequate treatment of economic history is extremely difficult to fit into the analysis of the industrial society in which we live and which chiefly interests our students. For this reason it is better, in my own judgment, to take it up as a separate study and with a separate book or set of books, either *pari passu* with the study of those doctrines which we try to develop as to contemporary society, or after such study, but hardly before it. This is not inconsistent with the use, in a text-book like this, in direct connection with the statement of principles, of specific illustrations from economic experience; tho the difficulty of finding apt illustrations and the almost inevitable resort to hypothetical cases are familiar to every teacher. Even the economic history of the United States, the most recent and the most modern body of economic experience, is not easily brought into close logical connection with our economic theory. The chapters on it in our text-books hang in the air, quite apart from the rest of the matter; and this is equally true of Professor Seligman's chapter. He tries, indeed, to connect the economic development of this country, if not with general principles, at least with his theories of the general evolution of society. "The [American] communities which had left the frontier stage behind them developed from the family system of industry, through the help, into the handicraft and domestic system" (p. 100). But this application of a doubtful generalization in economic history to the interpretation of our country's development seems to me purely fanciful: the economic history of the United States is distorted when it is forced into such a formula. So the South is said to have "heaped up its wealth in the transition forms from an isolated to a trade economy resting on slavery" (p. 102), again suggesting analogies of very doubtful accuracy. On the other hand, the charts on the production of corn, wheat, and oats, on capital invested in manufactures, average earnings of workmen, and the like, which are appended to this chapter on the economic history of the United States, seem to me to have the effect of mere pictures: they stand in no clear relation to anything said in

the text about economic development, still less in any relation to the general body of economic principles.

We come now to the third part in Professor Seligman's book,—the exposition of value, exchange, distribution, money, and the like. The chapters on these subjects contain, after all, the gist of what the economist has to say in a book like this. Here the interest is not so much in arrangement or selection as in the substantive conclusions. Unfortunately, we differ very much on some of the most important of these conclusions. I say unfortunately, for the differences are highly inconvenient to those of us who have to teach; tho doubtless they are in reality healthful, and will lead in the end to a better adjustment of our foundations. Professor Seligman is, in general, eclectic. He shows the results of omnivorous reading, and tries to give due weight to the reasoning of all sorts of diverging thinkers. On the crucial questions of distribution, however, he follows the lead of his colleague, Professor J. B. Clark. To express an opinion on this part of his book is, therefore, to express it on that scholar's contributions to economic theory.

Professor Seligman is more than appreciative of the debt he owes to his colleague, to whom he gives praise such as it is hazardous to accord to one still among us. In the introductory list of treatises Professor Clark's *Distribution of Wealth* is described as "of fundamental and epoch-making importance" (p. 19),—a note of praise not sounded for any other living economist. I can only record regretfully my dissent from such unique praise, and my dissent from an exposition of economic principles which follows so largely Professor Clark's lead. Those who accede to the Clarkian reasoning and conclusions will, of course, welcome their incorporation into a volume for students. Those who, like myself, think much of that reasoning inconclusive and many of the theorems untenable, will be loth to teach them. I cannot, for example, find it a helpful way of explaining distribution to describe all incomes as surplus. As Professor Seligman puts the doctrine (p. 374), "The rent of a boat is a

surplus over that of a no-rent boat; the wages of a laborer is [*sic*] a surplus over that of the convict or no-wage laborer; the interest of capital is a surplus over the capital so invested as to earn no interest." No doubt there always is some fraction of capital which is nearly worn out, and which continues to be used, through lack of intelligence or enterprise, even tho it no longer yields a return. But I have never been able to see that it sets the pace, so to speak,— that it settles the remuneration for all capital. And it has always seemed to me even less in accord with the facts to speak of "the convict or no-wage laborer" (Professor Clark mentioned lunatics: his colleague does not go so far) as setting a standard by which all other wages are measured and determined. Again, in this volume, as in Professor Clark's writings, rent and interest are treated as two phases of the same phenomenon: "interest is commuted rent" (p. 392). There are, however, remarks which indicate that Professor Seligman is not willing to go the full length on this last topic, and would admit that there is some difference of moment between rent and interest. Speaking of the single tax, he maintains that there is unearned increment not only from land, but elsewhere as well, mentioning investments "in the shares of a street railway, a newspaper, or a bank" (p. 390), whose value may be enhanced by the growth of population. (Observe, by the way, that one of these cases—the street railway—is precisely such as the consistent single-taxer would select for applying his principle; while the other two—newspapers and banks—happen to illustrate conspicuously the importance of good will.) He adds: "It may, nevertheless, be conceded that there is a difference to this extent, that ultimately the ownership of the capital controls its management and conditions its most effective utilization,"—a difference which justifies "a somewhat higher rate of taxation on land." This implies that, after all, rent and interest do not represent merely two ways of looking at the same thing, but are phenomena between which there are fundamental differences.

Whatever be one's opinions on these crucial questions,

the beginner in economics will find great difficulty in following this exposition of the Clarkian doctrines. I find great difficulty in following these doctrines myself, and suspect that many brother economists are in the same case. The explanation is that, whether at bottom sound or not, they have not been sufficiently sifted and worked out. Professor Seligman's style in general is direct and positive: it has the great merit of absolute lack of affectation. But even the student who is well trained and diligent must have great difficulty in following his discussion of distribution and value. Sometimes this is due, I cannot but believe, to the fact that the thought itself is not clear and consistent. Take, for example, the passages on "individual and social cost" and "marginal social cost" (pp. 192, 198). "Although the street sweeper may work the harder, the sacrifice or cost to society is less than in the case of a factory hand. The latter saves society more effort" (p. 193). Now this is a conception of cost and sacrifice entirely different from the usual one, and it has nothing to do with the familiar and important problem whether reward is in proportion to sacrifice. Its only bearing is on the utility of a given sort of work, which might possibly be measured in some such way; tho even from this point of view I see no conclusion to be drawn from the notion, and no application to the explanation of exchange and value. Much is said also as to the distinction between individual and social utility. The gist of this matter is very simple. In a large and complicated society the demands of a great many persons of different tastes and different purchasing power affect the price at which an article will be disposed of. This, and nothing more, is meant when it is said that "society" demands a thing, or "society" sets the price at which a thing will be sold. I have never been able to see that Professor Clark's elaborated theories do more than set forth this familiar fact. I have the same feeling—it may be due to dulness on my part—in regard to Professor Clark's distinction between the utility of a commodity as a whole and the different constituent utilities of the commodity. All readers of Professor Clark will recall the

chapter in which the highly ornamented canoe is so elaborately analyzed.[1] The distinction, which has doubtless puzzled many readers, is explained by Professor Seligman with much care, as "Clark's law, from its first formulator." Yet I have never been able to find in this law anything more than a prolonged statement of things sufficiently obvious, with no application or conclusion of serious consequence for the understanding of economic phenomena.

There are passages in Professor Seligman's book where either the reasoning is at fault or else the exposition so brief that it is impossible to make out just what the reasoning is. Sometimes, too, there is positive carelessness. A few instances will indicate the sort of criticism I feel compelled to offer on the book in this regard.

Of marginal utility it is said that, "if in the case of five apples the marginal utility of each is five units of satisfaction, that of the stock will be five times five, or twenty-five; but, if in the case of eight apples the marginal utility of each falls to three, that of the stock will be eight times three, or twenty-four. Yet the total utility of eight apples is certainly more than that of five" (p. 177). Do we apply the notion of marginal utility to a "stock," or measure total marginal utility as distinguished from total utility? Professor Seligman probably has it in mind that total exchange value is ascertained through multiplying by the number of units the value fixed by marginal utility. He seems to confound total exchange value with total utility. Incidentally, it may be noted that his conception of consumer's surplus is quite different from that of Professor Marshall, to whom he refers (p. 194).

Under the "law of joint cost"—by-products and the like —there is the following: "When domestic manufacturers get rid of a portion of their surplus output by 'dumping' it abroad at prices far lower than at home, it does not follow that the lower foreign prices make the domestic price higher than it would otherwise be. On the contrary, the foreign sales at the lower price may be the only means of keeping

[1] See his *Distribution of Wealth*, ch. xvi.

the factory going, and may thus make the domestic price lower than it would be if the producer had to charge up to his domestic goods the total expenses of unremunerative production" (pp. 252, 253). On this it is to be remarked, first, that here we have no case of joint cost or of by-products. The theory of joint cost refers to *different* commodities—say wool and mutton—produced by the same operation. "Dumping" means that different units of the *same* commodity are sold in one market cheaper than in another,—quite another phenomenon. Second, what curious reasoning is this about the effects of dumping! Does the diminution of the supply sold in the domestic market really make prices lower at home, or does it make them higher, as it is clearly meant to do? What becomes of our reasoning as to marginal utility and the familiar effect of a decrease in supply on price? And is there some immanent force which compels manufacturers to engage in "unremunerative production"; and to "charge up" the expenses thereof to some persons or other?

Professor Seligman rejects the strict quantity theory of money in one passage: "Doubling the quantity of money will not result in doubling the price level: . . . the relation of quantity to value is not precisely proportional" (p. 455). Yet on the next page (456) he says that "the volume of money multiplied by the rapidity of circulation is equal to the number of transactions in cash that are effected at a given price level." The language is not careful: "the volume of money" cannot be accurately said to be equal to "the number of transactions"; but is not this precisely a statement of the quantity theory, with that qualification as to rapidity of circulation which has always been part of it? Yet, as to "fiat" money (very briefly discussed), it is said that the legal tender quality will not prevent depreciation "unless its quantity is carefully restricted *and* unless it is kept redeemable in metallic money" (p. 453). I have italicized the word "and," since the clause following it states, of course, the case of paper money which, being redeemable, is not of the fiat kind. Apparently, Professor

Seligman believes that paper which is really inconvertible will depreciate, however limited its quantity. But it is impossible to make out whether he does or does not accede to the strict Ricardian doctrine.

A most curious and inexplicable slip is made in the chapter on the economic history of the United States. There the recent growth of manufacturers is referred to, and it is said that "it will surprise many readers to learn that there were in 1900 six classes of manufactured products, each aggregating over half a billion dollars in value, as against one agricultural product and no mineral product" (p. 104). The figures supporting this statement (p. 105) appear on the briefest examination to be worthless, for they evidently give the gross value of manufactures, with no allowance for materials used. Thus pig iron is given under mineral products as having an output of 260 (millions), while under manufactures we have "iron and steel" as 804, with no intimation that the pig iron is one of the materials used in the manufacturing of iron and steel, not to mention coal and coke and the like. Slaughtering and meat-packing are given as 790, and men's and women's clothing as 575, again with no regard to the value of materials used. These figure as great manufactures, outranking every agricultural industry. By this sort of calculation the cotton manufacture would invariably be found a more important industry than cotton-growing, and the manufacture of flour more important than wheat-raising. In fact, "flouring and grist mill" appear in this list, with a product of 561 millions, and "bread and bakery" with a further product of 204 millions![1]

[1] I have not taken the trouble to check all of Professor Seligman's figures. The following comparison with the *Statistical Abstract* indicates the source and extent of his error for a few cases:—

	Seligman's figures.	*Statist. Abstract figures.*	
		Gross.	*Value of materials used.*
Cotton manufacture	339	339	176
Slaughtering and meat-packing	790	790	687
Lumbering	567	567	318
Foundry and machine shop	645	645	286
Flouring and grist mill	561	561	476
Boots and shoes	261	261	169

Some of the passages just considered suffer from unduly brief exposition. The book is on an encyclopedic plan, and, as a text-book, suffers from covering so much ground. Professor Seligman has tried to pack too much into it. He has left himself no chance for reasoning with his audience. Our subject offers peculiar opportunities for training people to think, and to think with care and consistency. This essential end has not been attained, I cannot but believe, in Professor Seligman's book, which, therefore, seems to me not commendable for use with students. This conclusion, and the general criticisms on the book, I offer with much regret, yet with a feeling that we economists owe it to our subject to deal frankly one with another.

F. W. Taussig.